



Analytical Results

Date: *Sunday, September 15, 2019*

Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion-CN
Client Sample ID: Lagoon Channel Inlet
Sample Description:
Matrix: Aqueous

Work Order/ID: 19I0852-01
Sampled: 09/15/2019 0:00
Received: 09/15/2019 0:00

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN C/E-1999					
			Prep Method: NA					
			Analyst: ABG					
			Prep Date/Time: 09/15/2019 11:55					
Total Cyanide								
Cyanide, Total	dij	A	0.0089	0.0050		mg/L	1	09/15/2019 13:55

Microbac Laboratories, Inc.

250 West 84th Drive | Merrillville, IN 46410 | 800.536.8379 p | 219.769.8378 p | 219.769.1664 f | www.microbac.com

Analytical Results

Date: *Sunday, September 15, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19I0852-02
Client Project:	NPDES Excursion-CN	Sampled:	09/15/2019 0:00
Client Sample ID:	South Lagoon Inlet	Received:	09/15/2019 0:00
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN C/E-1999		Analyst: ABG			
Total Cyanide			Prep Method: NA		Prep Date/Time: 09/15/2019 11:55			
Cyanide, Total	dij	A	0.0056	0.0050		mg/L	1	09/15/2019 13:57

Analytical Results

Date: *Sunday, September 15, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19I0852-03
Client Project:	NPDES Excursion-CN	Sampled:	09/15/2019 0:00
Client Sample ID:	011	Received:	09/15/2019 0:00
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN C/E-1999		Analyst: ABG			
Total Cyanide			Prep Method: NA		Prep Date/Time: 09/15/2019 11:55			
Cyanide, Total	dij	A	0.0056	0.0050		mg/L	1	09/15/2019 13:59

ANALYTE TYPES: (AT)

A, B = Target Analyte

I = Internal Standard

M = Summation Analyte

S = Surrogate

T = Tentatively Identified Compound (TIC, concentration estimated)



QC SAMPLE IDENTIFICATIONS

BLK = Method Blank

DUP = Method Duplicate

BS = Method Blank Spike

MS = Matrix Spike

ICB = Initial Calibration Blank

CCB = Continuing Calibration Blank

CRL = Client Required Reporting Limit

PDS = Post Digestion Spike

QCS = Quality Control Standard

ICSA = Interference Check Standard "A"

ICSAB = Interference Check Standard "AB"

BSD = Method Blank Spike Duplicate

MSD = Matrix Spike Duplicate

ICV = Initial Calibration Verification

CCV = Continuing Calibration Verification

OPR = Ongoing Precision and Recovery Standard

SD = Serial Dilution

CERTIFICATIONS (Certs)

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

d Illinois EPA drinking water, wastewater and solid waste analysis (#200064)

i Kansas Dept Health & Env. NELAP (#E-10397)

j Kentucky Wastewater Laboratory Certification Program (#108202)

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)**RL:** Reporting Limit**RPD:** Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler

Temp: °C
The logo for Microbac Laboratories, Inc. features a stylized blue and green hexagonal icon to the left of the word "MICROBAC" in a bold, grey, sans-serif font, with a registered trademark symbol (®) to the right.

Comments

No times on sample containers

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	No
Correct type of Containers Received	Yes
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	No
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

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